



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,432	02/02/2004	Adam Leslie Clark	6882P007	3364

26263 7590 11/01/2006

SONNENSCHN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER

AGHDAM, FRESHTEH N

ART UNIT	PAPER NUMBER
----------	--------------

2611

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

54

Office Action Summary	Application No.	Applicant(s)	
	10/770,432	CLARK, ADAM LESLIE	
	Examiner	Art Unit	
	Freshteh N. Aghdam	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/10/2006 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

Claims 1-20 are rejected as being unpatentable under 35 U.S.C. 101. As to claims 1, 11, and 20, the claimed inventions are directed to non-statutory subject matters because as a whole they do not accomplish practical applications. In order to accomplish a practical application, it must produce a useful, concrete and tangible result." (see Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, pages 21-22). Applicant in claim 1, recites a method, however, there is no tangible result disclosed for this method. Applicant in claim 11, recites a

Art Unit: 2611

method, however, there is no tangible result disclosed for this method. Applicant in claim 20, recites a method, however, there is no tangible result disclosed for this method.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/851,276 (US 2002/0181555).

Regarding claims 1 and 20 of the instant application, the limitations of claims 1 and 20 of the instant application is recited in claim 1 of the copending application except that the copending application includes a limitation for further compressing the table of encoded data values using a data compression process; and transmitting the further compressed table of encoded data values. It would have been obvious to one of ordinary skill in the art at the time of invention to remove the step of compressing the

Art Unit: 2611

table of encoded data values using a data compression process in order to reduce the steps; and furthermore, no data recovery is performed such as compression and/ or decompression in which it reduces cost in implementing a communication device.

Claim 2 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/851,276 (US 2002/0181555).

Regarding claim 2 of the instant application, the limitations of claim 2 of the instant application is recited in claim 3 of the copending application except that the copending application includes a limitation for further compressing the table of encoded data values using a data compression process; and transmitting the further compressed table of encoded data values. It would have been obvious to one of ordinary skill in the art at the time of invention to remove the step of compressing the table of encoded data values using a data compression process in order to reduce the steps; and furthermore, no data recovery is performed such as compression and/ or decompression in which it reduces cost in implementing a communication device.

Claim 6 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/851,276 (US 2002/0181555).

Regarding claim 6 of the instant application, the limitations of claim 6 of the instant application is recited in claim 1 of the copending application except that the copending application includes a limitation for further compressing the table of encoded data values using a data compression process. It would have been obvious to one of

Art Unit: 2611

ordinary skill in the art at the time of invention remove the step of compressing the table of encoded data values using a data compression process in order to reduce the steps; and furthermore, no data recovery such as compression and/ or decompression is performed in which it reduces cost in implementing a communication device.

Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 10/851,276 (US 2002/0181555).

Regarding claim 7 of the instant application, the limitations of claim 7 of the instant application is recited in claim 2 of the copending application except that the copending application includes a limitation for further compressing the table of encoded data values using a data compression process. It would have been obvious to one of ordinary skill in the art at the time of invention to remove the step of compressing the table of encoded data values using a data compression process in order to reduce the steps; and furthermore, no data recovery such as compression and/ or decompression is performed in which it reduces cost in implementing a communication device.

Claim 8 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 10/851,276 (US 2002/0181555).

Regarding claim 8 of the instant application, the limitations of claim 8 of the instant application is recited in claim 2 of the copending application except that the copending application includes a limitation for further compressing the table of encoded data values using a data compression process. It would have been obvious to one of

Art Unit: 2611

ordinary skill in the art at the time of invention to remove the step of compressing the table of encoded data values using a data compression process in order to reduce the steps; and furthermore, no data recovery such as compression and/ or decompression is performed in which it reduces cost in implementing a communication device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 11-12, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mavlar (US 2005/0094883), and further in view of Sah et al (US 2003/0028509).

As to claims 1 and 20, Mavlar teaches a method and/ or apparatus comprising encoding data values described by one or more multi-dimensional parameters, each of the multidimensional parameters having multiple constituent sub-parameters of more than one value (Par. 5); mapping the multi-dimensional parameters of the data values to respective one-dimensional parameters having a single sub-parameter by which the multi-dimensional parameters will now be represented (Par. 5) and creating a table of encoded data values (i.e. run length coding) in which the data values are represented by their respective encoded counterparts utilizing the one-dimensional parameters Par. 5; Pg. 7, Tables 2-3). Mavlar is silent about the redundant ones of the encoded data

Art Unit: 2611

values share common table entries. Sah teaches compressing data values using run length encoding, wherein the redundant ones of data values share common table entries (Pg. 5, Par. 52-58). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Sah with Lim in order to reduce memory consumption for the data in which it is advantageous when the data is repeatedly scanned (Par. 58).

As to claim 11, Mavlar teaches a method comprising encoding data values having one or more multi-dimensional parameters, each of the multi-dimensional parameters having multiple constituent sub-parameters of more than one value to describe an associated one of the parameters (Par. 5) by combining a lossy encoding (i.e. DCT and quantizing coding) process in which the multiple constituent sub-parameters of each of the one or more multidimensional parameters of the data values are mapped to respective one-dimensional parameters having a single sub-parameter by which the multi-dimensional parameters will now be represented and stored in a table of encoded data values (run-length coding). Mavlar is silent about a lossless encoding process in which redundant ones of the encoded data values are arranged to share common entries. Sah teaches compressing data values using run length encoding that is lossless, wherein the redundant ones of data values share common table entries (Pg. 5, Par. 52-58). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Sah with Mavlar in order to reduce memory consumption for the data in which it is advantageous when the data is repeatedly scanned (Par. 58).

As to claims 2 and 12, Mavlar teaches the data values comprise pixel information (Par. 5).

As to claims 4 and 14, Sah further teaches the encoded data values share identical parameter values (Par. 52-58).

Claims 3, 6-10, 13, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mavlar and Sah et al, further in view of Lim (US 5,339,164).

As to claims 3 and 13, Mavlar and Sah teach all the subject matter claimed in claims 1 and 11, except for the data values being position information. One of ordinary skill in the art would clearly recognize that the data values comprise pixels, position information and color as it is evidenced by Lim (Abstract; Col. 19, Lines 56-67). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Lim with Mavlar and Sah in order to minimize the amount of digital data required to adequately represent image and enhances the speed at which the data can be communicated Col. 1, Lines 26-35).

As to claims 6 and 16, Mavlar and Sah teach all the subject matter claimed in claims 1 and 11, except for transmitting the table of encoded data values to a receiver. Lim teaches transmitting the table of encoded data values to a receiver (Fig. 14A, Block 1432). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Lim with Mavlar and Sah in order to minimize the amount of digital data required to adequately represent image and enhances the speed at which the data can be communicated Col. 1, Lines 26-35).

Art Unit: 2611

As to claims 7, 10, and 17, Lim further teaches decoding the table of encoded data values at the receiver using the table of encoded data values (Fig. 13B,) and a set of reference information (Fig. 13A and B; Fig. 12B, Blocks 1236 and 1238; Col. 18, Lines 54-66; Col. 19, Lines 1-6), wherein the reference information comprises a lookup table.

As to claims 8 and 18, Lim further teaches transmitting the reference information values together with the table of encoded data values (Fig. 13A and B; Col. 14, Lines 2-25).

As to claims 9 and 19, Lim further teaches storing the reference information values at the receiver prior to the transmission of the table of encoded data values (Fig. 13A and B; Col. 14, Lines 15-38).

Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim and Sah, further in view of Uchibayashi (US 2003/0133169).

As to claims 5 and 15, Lim and Sah teach all the subject matters claimed above, except for the redundant ones of the encoded data values share parameter values, which are similar to one another within a tolerance range. Uchibayashi teaches the redundant ones of the encoded data values share parameter values, which are similar to one another within a tolerance range (Par. 2). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Uchibayashi with Lim and Sah in order to identify the redundant information values to reduce the amount of

Art Unit: 2611

scanning necessary by a storage node and reduces memory consumption for the data file when scanned into memory.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571) 272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Freshteh Aghdam
October 24, 2006


KEVIN BURD
PRIMARY EXAMINER